Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604366N: Standard Missile Improvements

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)			FY 2012	FY 2012	FY 2012					Cost To	
COST (\$ III WIIIIOTIS)	FY 2010	FY 2011	Base	OCO	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	<b>Total Cost</b>
Total Program Element	150.076	96.186	46.705	-	46.705	21.406	6.430	4.213	4.394	Continuing	Continuing
0439: Standard Missile Improvement	28.908	26.054	17.348	-	17.348	4.155	0.250	0.253	0.248	Continuing	Continuing
3092: Standard Missile 6 Program	120.371	70.132	29.357	-	29.357	17.251	6.180	3.960	4.146	Continuing	Continuing
9999: Congressional Adds	0.797	-	-	-	-	-	-	-	-	0.000	0.797

#### A. Mission Description and Budget Item Justification

Standard Missile (SM) is the Navy's premier Anti-Air Warfare (AAW) missile, providing both area air defense for the fleet and self defense for individual AEGIS CGs and DDGs, as required by the Joint Theater Air Missile Defense (TAMD), Mission Need Statement (MNS), Defense Planning Guidance (DPG), Quadrennial Defense Review (QDR), and Ship Class AAW Self Defense Capstone Requirements Document. Agility, fuzing, and computer modifications to SM are in development to restore performance in the near term against a specific existing proliferating Anti-Ship Cruise Missile (ASCM) threat. Continuous analysis of missile capabilities vs. everevolving and proliferating aircraft and ASCM threats and long-range planning are required to keep pace with the threat.

In FY04 the STANDARD Missile 6 (SM-6) program was started to develop an advanced surface missile system with an active seeker and an extended range. The SM-6 missile system will leverage the Navy investment in the AEGIS Weapon System (AWS), Cooperative Engagement Capability (CEC), and airborne early warning systems, which will be upgraded in concert with missile development to support a fully integrated extended range detect-to-engage naval and joint integrated fire control capability. SM-6 is the enabler for Integrated Fire Control (IFC). Funding to support those upgrades are also included in this line. SM-6 has completed the ground based test program and has commenced the at-sea DT/OT flight test phase of the System Development & Demonstration (SD&D) effort. Together, this family of systems will provide the air superiority and the umbrella of protection against the full spectrum of projected future cruise missile (anti-ship and land attack) and manned aircraft threats discussed in the Joint TAMD MNS, DPG, QDR, IAMD Roadmap, IAMD Joint Integrating Concept, AIAMD Joint Operating Concept and TAMD Capstone Requirements Document.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604366N: Standard Missile Improvements	

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	167.200	96.186	57.474	-	57.474
Current President's Budget	150.076	96.186	46.705	-	46.705
Total Adjustments	-17.124	-	-10.769	-	-10.769
<ul> <li>Congressional General Reductions</li> </ul>		-			
<ul> <li>Congressional Directed Reductions</li> </ul>		-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>		-			
<ul> <li>Congressional Directed Transfers</li> </ul>		-			
Reprogrammings	-10.876	-			
SBIR/STTR Transfer	-5.815	-			
Program Adjustments	-	-	-10.426	-	-10.426
<ul> <li>Section 219 Reprogramming</li> </ul>	-0.390	-	-	-	-
Rate/Misc Adjustments	-	-	-0.343	-	-0.343
<ul> <li>Congressional General Reductions Adjustments</li> </ul>	-0.043	-	-	-	-

# **Congressional Add Details (\$ in Millions, and Includes General Reductions)**

Project: 9999: Congressional Adds

Congressional Add: Automated Missile Tracking

	FY 2010	FY 2011
	0.797	-
Congressional Add Subtotals for Project: 9999	0.797	-
Congressional Add Totals for all Projects	0.797	-

## **Change Summary Explanation**

Technical: Not applicable.

Schedule: Not applicable.

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**DATE:** February 2011

APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Tes BA 5: Development & Demonstration	t & Evaluation	n, Navy	R-1 ITEM NOMENCLATURE PE 0604366N: Standard Missile Improvements  PROJECT 0439: Standard Missile Impro					Improvemen	t		
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	-						Cost To Complete	Total Cost
0439: Standard Missile Improvement	28.908	26.054	17.348	-	17.348	4.155	0.250	0.253	0.248	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy

Modifications to SM-2 BLK IIIB are required for use on DDG-1000 class destroyers. The Joint Universal Waveform Link (JUWL) will be integrated with ESSM and Standard Missile to communicate with the DDG-1000 SPY-3 radar. SM-2 missile software will be updated with interrupted continuous wave illumination (ICWI) in order to allow operation with DDG-1000.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Standard Missile Improvement	28.908	26.054	17.348
Articles:	0	0	0
Description: DDG-1000 Pre Plan Product Improvement (P3I)Link Integration/Interrupted Continuous Wave Illuminator (ICWI)			
FY 2010 Accomplishments: ESSM conducted Preliminary Design Review (PDR), assembled Proof of Design (POD) assets, and conducted Design Verification Testing (DVT). SM-2 conducted System Requirements Review and System Functional Review, and began design development. ICWI development delayed 16 months as a result of FY10 reduction.			
FY 2011 Plans: ESSM conducts Critical Design Review (CDR), orders and assembles Production Representative Model (PRM) assets, and conducts qualification testing. SM-2 conducts PDR for JUWL only and orders POD hardware.			
FY 2012 Plans: ESSM completes qualification testing and Test Readiness Review, and completes the Inert Operational Missile (IOM) to aid in ship-to-missile integration. SM-2 conducts DVT on POD hardware, conducts PDR for ICWI, conducts CDR for JUWL only, and orders PRMs.			
Accomplishments/Planned Programs Subtotals	28.908	26.054	17.348

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604366N: Standard Missile Improvements	0439: Stand	dard Missile Improvement
BA 5: Development & Demonstration (SDD)			

### C. Other Program Funding Summary (\$ in Millions)

N/A

### **D. Acquisition Strategy**

Development is expected to conclude by FY16 for the X-band JUWL and ICWI. Production representative missiles will be built between FY11 and FY13 for 59 ESSM missiles and 26 SM missiles required to support Developmental Test & Operational Test (DT & OT) in FY13 through FY15 and continue follow-on ship integration and design update effort in FY16.

#### E. Performance Metrics

- ESSM initial engineering design for X-Band JUWL capability was completed and Engineering Development Models (EDMs) were built and tested.
- ESSM successfully completed its Preliminary Design Review in October 2009.
- ESSM will order material/parts and assemble Proof of Design units to conduct design verification tests.
- ESSM will conduct its Critical Design Review in third Quarter FY11.
- In October 2010 SM-2 begins full scale engineering development of X-Band JUWL capability and limited implementation of interrupted continuous wave illumination (ICWI) functionality.
- SM-2 PDR for JUWL is planned for third quarter FY11.
- Integration Testing and datalink qualification for JUWL testing 2012

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604366N: Standard Missile Improvements | 0439: Standard Missile Improvement

PROJECT

**DATE:** February 2011

Product Development	(\$ in Millio	ns)		FY 2	2011	FY 2 Ba	-		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Design and Analysis1	SS/CPAF	RAYTHEON:Tucson, AZ	195.432	25.044	Dec 2010	16.848	Nov 2011	-		16.848	Continuing	Continuing	Continuing
Design and Analysis2	C/CPFF	JHU/APL:Laurel, MD	3.750	-		-		-		-	0.000	3.750	
Design and Analysis3	MIPR	MIT/Lin Lab:Lexington, MA	0.050	-		-		-		-	0.000	0.050	
Design and Analysis4	WR	NSWC:Dahlgren	787.314	-		-		-		-	0.000	787.314	
Design and Analysis5	WR	NSWC:Indian Head	0.940	-		-		-		-	0.000	0.940	
Design and Analysis6	WR	NAWC:China Lake	3.030	-		-		-		-	0.000	3.030	
Design and Analysis7	Various	LOCKHEED MARTIN:Moorestown, NJ	17.775	-		-		-		-	0.000	17.775	
Design and Analysis8	WR	CNO:Washington, DC	0.010	-		-		-		-	0.000	0.010	
Design and Analysis9	WR	CMDP:Phoenix, AZ	4.795	-		-		-		-	0.000	4.795	
Design and Analysis11	WR	NSWC:Crane	0.257	-		-		-		-	0.000	0.257	
Design and Analysis12	WR	DOI&CNAP:Washington, DC	0.487	-		-		-		-	0.000	0.487	
Design and Analysis13	WR	COMPTEVFOR:Norfolk, VA	0.100	-		-		-		-	0.000	0.100	
Design and Analysis14	C/CPFF	LOCKHEED MARTIN:Moorestown, NJ	2.000	-		-		-		-	0.000	2.000	
Design and Analysis15	WR	CARDEROCK:Bethesda, MD	0.050	-		-		-		-	0.000	0.050	
Design and Analysis16	WR	NWAS:Corona	0.325	-		-		-		-	0.000	0.325	
Design and Analysis17	C/CPFF	CORVID:Mooresville, NC	0.100	-		-		-		-	0.000	0.100	
Design and Analysis18	C/CPFF	BAE:Rockville, MD	0.101	-		-		-		-	0.000	0.101	
Design and Analysis19	MIPR	MDA:Dahlgren,VA	1.257	-		-		-		-	0.000	1.257	
Design and Analysis20	WR	IWS3D:ARLINGTON, VA	-	1.000	Nov 2010	0.490	Nov 2011	-		0.490	0.000	1.490	
		Subtotal	1,017.773	26.044		17.338		-		17.338			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604366N: Standard Missile Improvements | 0439: Standard Missile Improvement

PROJECT

**DATE:** February 2011

Test and Evaluation (\$ i	est and Evaluation (\$ in Millions)				011		2012 se	FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DEVELOPMENTAL TEST & EVALUATION1	WR	NSWC:Port Hueneme	0.185	-		-		-		-	0.000	0.185	
DEVELOPMENTAL TEST & EVALUATION2	WR	WSMR:New Mexico	1.600	-		-		-		-	0.000	1.600	
DEVELOPMENTAL TEST & EVALUATION3	WR	NAWC:Pt Mugu	0.098	-		-		-		-	0.000	0.098	
DEVELOPMENTAL TEST & EVALUATION4	WR	PMRF:Hawaii	0.338	-		-		-		-	0.000	0.338	
DEVELOPMENTAL TEST & EVALUATION5	WR	NSWC:PHD/Techrep	0.567	-		-		-		-	0.000	0.567	
		Subtotal	2.788	-		-		-		-	0.000	2.788	

Management Services (\$ in Millions)				FY 2	2011		2012 se		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CONTRACTOR ENGINEERING SUPPORT	C/CPAF	VARIOUS:VARIOUS	1.993	-		-		-		-	0.000	1.993	
PROGRAM MANAGEMENT SUPPORT	C/CPAF	VARIOUS:VARIOUS	2.294	-		-		-		-	0.000	2.294	
TRAVEL	Allot	IWS3:Arlington, VA	0.056	0.010	Feb 2011	0.010	Nov 2011	-		0.010	0.000	0.076	
	-	Subtotal	4.343	0.010		0.010		-		0.010	0.000	4.363	

	Total Prior Years			EV 1	2012	EV	2012	FY 2012	Cost To		Target Value of
		FV.	0044							Tatal Cast	
	Cost	FY 2	2011	Ba	ise	0	co	Total	Complete	Total Cost	Contract
Project Cost Totals	1,024.904	26.054		17.348		_		17.348			

Remarks

DATE: February 2011

Exhibit N-ZA, ND I & L FTOJECT 3031	illication. F	2012 Ivavy							DAIL. 1 60	luary 2011	
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstratio	t & Evaluation	n, Navy			OMENCLATON: Standard		PROJECT ille Improvements 3092: Standard Missile 6 Program				
COST (\$ in Millions)	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost		
3092: Standard Missile 6 Program	120.371	70.132	29.357	.357 - 29.357 17.251 6.180 3.960 4.146 Cor						Continuing	Continuing
Quantity of RDT&F Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

Fyhibit R-24 RDT&F Project Justification: PR 2012 Navy

This program leverages existing missile technology and advanced missile technology. It aligns missile technology roadmaps across the Services (NAVSEA, NAVAIR, USAF, USMC and USA) and missile variants within the Services, taking advantage of the Navy's investment in the AEGIS Weapon System (AWS), CEC, and airborne early warning systems. This

missile will provide an extended range engagement capability to provide the air superiority and the umbrella of protection for joint U.S. forces and allies against the full spectrum of manned-fixed and rotary-wing aircraft, unmanned aerial vehicles, and land attack and anti-ship cruise missiles in flight, thereby contributing to the continuous protection of forward deployed ground maneuver forces as well as theater rear assets as discussed in the Joint TAMD MNS, DPG, QDR, TAMD Capstone Requirements Document, Forward From the Sea, Joint Vision 2010/2020, the 2002/2003 Naval Transformational Roadmap and the Operational Requirements Document for SM-6 BLK 1.

This project addresses the Navy's requirement for an extended range area air defense missile with engage-on-remote and over-the-horizon capability as the enabler for USN and Joint integrated fire control. The SM-6 BLK 1 is the Navy's transformational enabler for the Sea Shield Operational Concept and enables the opportunity for Sea Basing and Sea Strike. This effort includes risk reduction, System Development and Demonstration (SD&D) design, insensitive munitions improvement, transition to production and operational test of the latest STANDARD Missile with the kinematic performance to defeat current and projected threats that possess low altitude, high altitude, and high velocity and maneuver characteristics at the max kinematic range of the missile. SM-6 is currently executing the DT/OT flight test phase of the SD&D effort.

The Joint Integrated Fire Enhancement funding is JROC directed for the demonstration of the Joint Land Attack Elevated Netted Sensor (JLENS) into the Naval Integrated Fire Control-Counter Air (NIFC-CA) kill chain; specifically, SM-6 integration with the JLENS and the AEGIS Weapon System (AWS). The funding identified in this budget is part of an integrated funding package that also includes funding for PEO IWS 1.0, PEO IWS 6.0, PEO IWS 7.0 and the Army's Cruise Missile Defense Systems JLENS Product Office. Additional funding is to support the integration, test, and analysis of the NIFC-CA test and evaluation strategy. Funds are also included for the transition of technology associated with the Missile Defense/Sea Shield Naval Interceptor Improvements (NII) Future Naval Capability (FNC) as formally signed in the NII Technology Transition Agreement (TTA) by PEO IWS 3, OPNAV N86, and the Office of Naval Research (PMR-51).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Joint Integrated Fire Enhancement	2.581	4.579	2.862
Articles:	0	0	0
Description: Joint Integrated Fire Enhancement			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: Fe	bruary 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PROJEC 3092: Sta	OJECT 92: Standard Missile 6 Program					
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2010	FY 2011	FY 2012		
FY 2010 Accomplishments: Initial scenario and test planning development and integration an	d test efforts.						
FY 2011 Plans: Scenario and test planning development and integration and test	activities and end-to-end scenario test predictions.						
FY 2012 Plans: Support Pair-wise testing between SM-6 and JLENS, conduct Ca (IFC) Kill Chain, support SM-6: 6 degrees of freedom (DoF) accrepost-flight analysis for JLENS IFC Live Fire Event.							
Title: SM 6 Missile Development		Articles:	99.294 0	52.017 0	14.189 (		
Description: Missile Development							
FY 2010 Accomplishments: GTV-3; DT/OT Flight Test execution at Pacific Missile Range Fac	cility (PMRF); 2 successful flight tests.						
FY 2011 Plans: DT/OT completion (3 flight tests planned) and 12 OT Flight Tests DT/OT-IIIA FOT&E preparation. Advanced Capability Build 12 (A (CSEDS) integration and test; Captive Carry Flight Test.							
FY 2012 Plans: Continue (ACB 12) and (CSEDS) integration and test; Continue (and test; Complete DT/OT-IIIA.	Captive Carry Flight Test; Integrated Fire Control (IFC) in	ntegration					
Title: Insensitive Munitions (IM)		Articles:	5.200 0	1.000 0	1.000		
FY 2010 Accomplishments: FY10: Perform (4) Slow Cook Off (SCO) tests: 1) Ballistic Barrier DTRM stops after pathfinder.	r stops at first article, 2) MK-72 stops at proof/burst testir	ng, 3)					
FY 2011 Plans: Continued testing and analysis.							
FY 2012 Plans:							

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604366N: Standard Missile Improvements	PROJECT 3092: Stand	dard Missile 6 Program

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Follow-on Test analysis.			
Title: SM6 OT&E Support	-	8.431	7.746
Articles:		0	0
<b>FY 2011 Plans:</b> This effort will complete activities related to the SM-6 OT Flight Testing and analyzing test results to support COMPTEVFOR. Preparation for DT/OT-IIIA.			
FY 2012 Plans: This effort will complete activities related to SM-6 FOT&E (DT/OT-IIIA) testing and analysis.			
Title: SM6/AWS & VLS Integration	13.296	4.105	3.560
Articles:	0	0	0
Description: SM6/AWS & VLS Integration			
FY 2010 Accomplishments: AEGIS Weapons System and MK 41 Vertical Launch Integration of SM-6 legacy.			
FY 2011 Plans: AEGIS Weapons System and MK 41 Vertical Launch Integration of SM-6 IFC mode to ACB12.			
FY 2012 Plans: AEGIS Weapons System and MK 41 Vertical Launch Integration of SM-6 IFC mode to ACB12.			
Accomplishments/Planned Programs Subtotals	120.371	70.132	29.357

## C. Other Program Funding Summary (\$ in Millions)

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	<u>Base</u>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	<b>Complete</b>	<b>Total Cost</b>
WPN 2234: Standard Missile	90.734	285.977	420.324	0.000	420.324	542.742	581.361	654.383	731.175	2,078.650	5,503.817

## D. Acquisition Strategy

The Navy awarded a contract for SM-6 development, design, testing, production and support (including spares) to Raytheon using other than full and open competition pursuant to the authority of 10 U.S.C. 2304(c)(1).

The active seeker guidance section for the SM-6 will be built in a joint production facility with the Advance Medium Range Air to Air Missile (AMRAAM).

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604366N: Standard Missile Improvements	3092: Stand	dard Missile 6 Program
BA 5: Development & Demonstration (SDD)			

The remainder of the SM-6 AUR components will be produced in existing production facilities that are currently producing other variants of the STANDARD missile.

No new facilities will be required for SM-6 production, and existing equipment will be used whenever possible.

No source other than Raytheon is capable of producing a shipboard BLK 1 missile within the Navy's schedule.

SM-6 Acquisition Strategy signed by OSD AT&L 3 March 2004.

#### **E. Performance Metrics**

Accomplishments

- SM-6 PABT WSESRB Executive Board 12 May 09
- ASN (RDA) Gate 6 14 May 09
- ASN (RDA) OIPT 2 Jun 09
- ASN (RDA) DAB 29 Jul 09
- CTV-1A Flight Test 28 Aug 09
- FY09 LRIP Lot Not to Exceed (NTE) Letter Contract Award 4 Sep 09
- DT/OT SSSTRP 7 Dec 09
- DT/OT WSESRB 16 Dec 09
- GTV-3 Flight Test 11 Jan 10
- DT/OT TRR Feb 10
- OIPT (Cost Certification) Mar 10
- DAB (Cost Certification) Mar 10
- DT/OT Flight Tests @ PMRF May 10
- FY09 LRIP NTE Definitization 1 Jul 10
- FY10 LRIP Option I Contract Award 1 Jul 10

SM-6 SD&D Contract SPI is currently at 0.992 and CPI is at 0.998

### **Upcoming Milestones**

- DT/OT Flight Tests @ PMRF Jan 11
- OT TRR Jun 11
- OT Flight Tests at PMRF Jul 11
- OT IIIA Apr 12 Dec 13
- Integrated Fire Control (IFC) Apr 12 Mar 14
- LRIP Option II Contract Award Mar 11

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604366N: Standard Missile Improvements | 3092: Standard Missile 6 Program

PROJECT

**DATE:** February 2011

Product Development (\$ in Millio		ns)		FY 2	2011	FY 2 Ba	2012 se	FY 2	2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Design & Analysis	C/CPIF	RAYTHEON:Tucson, AZ	633.500	14.730	Feb 2011	11.937	Dec 2011	-		11.937	0.000	660.167	
Design & Analysis	C/CPFF	JHU/APL:Laurel MD	37.922	4.186	Feb 2011	0.800	Nov 2011	-		0.800	0.000	42.908	
Design & Analysis	MIPR	MIT/Lin Lab:Lexington, MA	0.550	-		-		-		-	0.000	0.550	
Design & Analysis	WR	NAWC:China Lake	3.207	0.078	Nov 2010	-		-		-	0.000	3.285	
Design & Analysis	WR	NSWC:Dahlgren	8.837	1.008	Nov 2010	0.075	Nov 2011	-		0.075	0.000	9.920	
Design & Analysis	WR	NSWC:Indian Head	3.261	0.030	Nov 2010	-		-		-	0.000	3.291	
Design & Analysis	WR	NSWC:PHD	7.596	1.416	Nov 2010	-		-		-	0.000	9.012	
Design & Analysis	WR	NSWC:Crane	1.041	0.150	Nov 2010	-		-		-	0.000	1.191	
Design & Analysis	MIPR	JSPO:Eglin AFB	22.722	1.000	Nov 2010	-		-		-	0.000	23.722	
Design & Analysis	C/CPFF	LOCKHEED Martin:Moorestown, NJ	5.794	-		-		-		-	0.000	5.794	
Design & Analysis	WR	NSWC:Corona	15.938	0.621	Nov 2010	-		-		-	0.000	16.559	
Design & Analysis	Reqn	ONR:Arlington, VA	5.150	-		-		-		-	0.000	5.150	
Design & Analysis	Reqn	NRL:Washington, DC	0.090	-		-		-		-	0.000	0.090	
Design & Analysis	WR	COMPTEVFOR:Norfolk, VA	1.905	0.250	Nov 2010	-		-		-	0.000	2.155	
Design & Analysis	WR	CARDEROCK:Philadelph PA	nia, 2.349	0.200	Nov 2010	-		-		-	0.000	2.549	
Design & Analysis	WR	NSWC:Pt Mugu	0.613	-		-		-		-	0.000	0.613	
Design & Analysis	C/CPFF	BAE:Rockville, MD	6.446	-		-		-		-	0.000	6.446	
Design & Analysis	MIPR	ARMY:Redstone	0.050	-		-		-		-	0.000	0.050	
Design & Analysis	WR	NAWCAD:Pax River, MD	0.392	-		-		-		-	0.000	0.392	
Design & Analysis	C/CPFF	CORVID:Mooresville, NC	2.500	0.250	Mar 2011	0.250	Dec 2011	-		0.250	0.000	3.000	
Design & Analysis	C/CPFF	RNB:Arlington, VA	0.010	-		-		-		-	0.000	0.010	
Design & Analysis	WR	SPAWAR:Arlington, VA	0.007	-		-		-		-	0.000	0.007	
Design & Analysis	WR	ARMY:Cecom	0.066	-		-		-		-	0.000	0.066	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604366N: Standard Missile Improvements | 3092: Standard Missile 6 Program

PROJECT

**DATE:** February 2011

Product Development (	Product Development (\$ in Millions)						2012 se		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Design & Analysis	C/FP	GENERAL DYNAMICS:Falls Church, VA	1.660	-		-		-		-	0.000	1.660	
Design & Analysis	WR	VARIOUS:(IWS 1A)	52.713	7.060	Dec 2010	3.000	Nov 2011	-		3.000	0.000	62.773	
Design & Analysis	WR	VARIOUS:(VLS)	23.711	1.061	Nov 2010	0.560	Nov 2011	-		0.560	0.000	25.332	
		Subtotal	838.030	32.040		16.622		-		16.622	0.000	886.692	

Test and Evaluation (\$	and Evaluation (\$ in Millions)			FY 2011			2012 se	FY 2	2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develpomental Test & Evaluation	WR	NSWC:Port Hueneme	0.200	0.200	Jan 2011	0.200	Nov 2011	-		0.200	0.000	0.600	
Develpomental Test & Evaluation	WR	NSWC:WSMR	17.321	2.000	Jan 2011	3.000	Nov 2011	-		3.000	0.000	22.321	
Develpomental Test & Evaluation	WR	PMRF:Hawaii	23.089	15.000	Jan 2011	-		-		-	0.000	38.089	
Develpomental Test & Evaluation	WR	NAWC:Pt Mugu	0.769	-		-		-		-	0.000	0.769	
Develpomental Test & Evaluation	C/CPAF	RAYTHEON:Tucson, AZ	-	14.242	Feb 2011	8.435	Dec 2011	-		8.435	0.000	22.677	
Develpomental Test & Evaluation	C/CPFF	JHU/APL:Laurel, MD	-	1.250	Feb 2011	-		-		-	0.000	1.250	
Develpomental Test & Evaluation	WR	NSWC:Corona	-	1.750	Jan 2011	0.800	Nov 2011	-		0.800	0.000	2.550	
Develpomental Test & Evaluation	WR	COMPTEVFOR:Norfolk	-	0.250	Jan 2011	-		-		-	0.000	0.250	
Develpomental Test & Evaluation	WR	NSWC:Dahlgren	-	0.500	Jan 2011	-		-		-	0.000	0.500	
Developmental Test & Evaluation	WR	VLS:Arlington, VA	-	0.750	Jan 2011	0.300	Nov 2011	-		0.300	0.000	1.050	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy

R-1 ITEM NOMENCLATURE

**DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604366N: Standard Missile Improvements | 3092: Standard Missile 6 Program

Test and Evaluation (\$ in Millions)				FY 2011		FY 2 Ba		1	2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	41.379	35.942		12.735		-		12.735	0.000	90.056	
Management Services	(\$ in Millio	ns)		FY 2	2011	FY 2 Ba			2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering													

Cost Category Item	& Type	Activity & Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Complete	<b>Total Cost</b>	Contract
Contractor Engineering Services	C/CPAF	VARIOUS:Various	20.405	2.000	Nov 2010	-		-		-	0.000	22.405	
Travel	Various	IWS3:Arlington, VA	0.878	0.150	Jan 2011	-		-		-	0.000	1.028	
DAWDF	C/FP	Not Specified:Not Specified	1.130	-		-		-		-	0.000	1.130	
		Subtotal	22.413	2.150		-		_		-	0.000	24.563	
	·												
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	Total Prior Years Cost	FY 2	2011	FY 2012 Base		2012 CO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	901.822	70.132		29.357	-		29.357	0.000	1,001.311	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy	DATE: February 2011				
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
319: Research, Development, Test & Evaluation, Navy AA 5: Development & Demonstration (SDD)	PE 0604366N: Standard Missile Improvements				
	<u> </u>				

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0604366N: Standard Missile Improvements 3092: Standard Missile 6 Program

BA 5: Development & Demonstration (SDD)

## Schedule Details

	Sta	End		
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3092				
IOC/Deployment (Threshold)	4	2011	1	2012
IOC (Objective)	2	2011	2	2011
Full-Rate Production (FRP) Decision	1	2012	2	2012
Full Operational Capability (FOC)	4	2015	4	2015
WSESRB	2	2010	2	2012
Software Design/Final Qualification Test (FQT)	1	2010	3	2011
Captive Carry	1	2010	2	2011
CSEDS (ACB 12) (ACB 14)	4	2011	4	2013
DT WIT, OT WIT	1	2010	4	2010
Flight Test (GTV3)	1	2010	1	2010
Developmental Testing (DT-IIC1)	2	2010	2	2011
Developmental Testing (DT-IIC2/OT-[1-3])	2	2010	2	2011
Operational Testing (OT-[4-15 & 2 Spares])	4	2011	4	2011
OT IIIA	3	2012	1	2013
Integrated Fire Control (IFC)	3	2012	2	2014
Low-Rate Production I (Definitization)	4	2010	4	2010
Low-Rate Initial Production II (LRIP II Award)	4	2010	4	2010
Low-Rate Initial Production III (LRIP III Award)	2	2011	2	2011
Low-Rate Initial Production I Delivery	2	2011	3	2012
Low-Rate Initial Production II Delivery	3	2012	1	2013
Low-Rate Initial Production III Delivery	2	2013	1	2014

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy
BA 5: Development & Demonstration (SDD)

PE 0604366N: Standard Missile Improvements | 3092: Standard Missile 6 Program

Start End **Events by Sub Project** Quarter Year Quarter Year Full Rate Production (FRP) I-IV Award 2012 2015 Full Rate Production I (FRP) Deliveries 2015 2 2014 Full Rate Production II (FRP) Deliveries 2 2015 1 2016 Full Rate Production III (FRP) Deliveries 2 2016 4 2016

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Navy

Exhibit R-2A, RD1&E Project Justification: PB 2012 Navy									DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE P				PROJECT			
1319: Research, Development, Test & Evaluation, Navy			PE 0604366N: Standard Missile Improvements 9				9999: Congressional Adds				
BA 5: Development & Demonstrati	on (SDD)										
COST (\$ in Millions)			FY 2012	FY 2012	FY 2012					Cost To	
COST (\$ III WIIIIOHS)	FY 2010	FY 2011	Base	oco	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
9999: Congressional Adds	0.797	-	-	-	-	-	-	-	-	0.000	0.797
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

Automated Missile Tracking will evaluate a multitude of Radio Frequency Identification (RFID) passive devices to ensure that safe implementation is possible aboard a US Navy combatant.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011
Congressional Add: Automated Missile Tracking	0.797	-
<b>FY 2010 Accomplishments:</b> FY10: To provide maintenance history, inventory tracking and environmental exposure monitoring.		
Congressional Adds Subtotals	0.797	-

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

## **E. Performance Metrics**

Congressional Add.

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